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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/287,707 | 04/07/1999 | YASUJI MIZUTANI | 1832/36 | 6622 |

7590 10/08/2003

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| EXAMINER |
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SICONOLFI, ROBERT

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| ART UNIT | PAPER NUMBER |
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3683

DATE MAILED: 10/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/287,707

Applicant(s)

MIZUTANI ET AL.

Examiner

Robert A. Siconolfi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-43 is/are pending in the application.
- 4a) Of the above claim(s) 4-20 and 22-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) 1,3,21 and 35-43 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 32.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Request for reconsideration filed on 6/24/03 has been received. Information Disclosure Statement filed on 6/24/03 has been received.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 35-37, 39 and 41-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Lohberg (U. S. Patent no. 4,828,332).

See figure 2, brake operating member 2, brake master cylinder 32,34, brake cylinder unnumbered attached to wheels VL,VR,HL,HR, sensing device (stroke detector 19', wheel speed sensors 20,21), assisting device 30,31, control provided by ECU 22. Note Element 38 is NOT a counteracting motor, but merely a control element used to reset the brake pedal. See column 5 lines 51-54.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 38 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lohberg in view of Schramm et al.

Lohberg is relied upon as above. Lohberg does not disclose redundant sensors to detect pedal operation. Schramm et al teaches redundant sensors to detect pedal operation. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use redundant sensors to detect pedal operation as taught by Schramm et al in the system of Lohberg in order to provide a more reliable system.

Response to Arguments

6. Applicant's arguments filed 6/24/03 have been fully considered but they are not persuasive. Applicants have changed their definition of the distinction between the primary force and the brake operating force to one that reads upon structure that is standardized in the art. Allegations made previously that Lohberg did not disclose this distinction (for example paper no. 30 page 5 "applicants have argued that the primary drive force is not necessarily the value corresponding to the brake operating force in the arrangement of Lohberg") are obviously false since Lohberg has the same pedal structure (and therefore derives the same different due to the moment arm) as in the elected figure 15. The examiner has rescinded the 112 rejection but considers the limitation to merely define what is standard in the art and is present in Lohberg.

Applicants further argue that Lohberg provides a counteracting force to the brake pedal. This is mainly based on the incorrect assumption that the pivot point in the middle (the attachment to the rod going into the master cylinder) is fixed. It is clearly not

or the master cylinder would never supply brake pressure. Furthermore, the force applied by the assisting device is counteracted by the reaction force of the master cylinder (from the pressure of the hydraulic fluid) to produce a net force change of zero at the brake pedal. The assisting device of Lohberg will always decrease the amount of force needed to actuate the master cylinder a certain amount.

Applicants make the argument that there is no disclosure by Lohberg on controlling the amount of fluid in the pressurizing chamber but merely a disclosure of controlling the relationship between the "pedal travel", "foot pressure" and "brake force". Lohberg controls this relationship by controlling the amount of fluid as does all booster and assisting devices. The examiner knows of no other way to control these relationships for a hydraulic system.

The examiner would like to point out to the applicant that the claims as currently constituted are so broad that the assisting device also reads on the pneumatic brake boosters present in Lohberg. There is no limitation that limits the device to a hydraulic assisting device which is what the instant application discloses.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any


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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert A. Siconolfi whose telephone number is 703-305-0580. The examiner can normally be reached on M-F 10 am-3 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on (703) 308-3421. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.


Robert A. Siconolfi
Examiner
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RS